

Talking Points

- Vaccines are among the 20th Century's most successful and cost-effective public health tools available for preventing disease and death. They not only prevent a vaccinated individual from developing a potentially serious disease, but they also help protect the entire community by reducing the spread of infectious agents.
- Immunization coverage among children in the United States is higher today than ever before for most vaccines. We have attained our goal of having 90 percent or more of infants receiving the most critical doses of most recommended vaccines by age two. These very high immunization coverage levels translate into record or near record low levels of vaccine-preventable diseases. For most of the vaccine-preventable diseases, we have had reductions in morbidity of 95 percent or more.
- Vaccines not only save lives, they save money. The individual and community protection provided by vaccines help make immunization one of our most cost-effective public health strategies. All vaccines that we recommend for routine use are cost savings to society when both direct and indirect costs are considered. Importantly, most vaccines are cost-saving even if only direct medical costs are considered. Our country, for example, saves \$8.50 in direct medical costs for every dollar invested in diphtheria-tetanus-pertussis vaccine. When the savings associated with work loss, death, and disability are factored in, the total savings increases to about \$27 dollars per dollar invested in DTP vaccine. Every dollar our nation spends on measles-mumps-rubella vaccine generates about \$13 in total savings--- or about \$4 billion each year.
- Today there are far fewer visible reminders of the unnecessary suffering, injuries, and premature deaths caused by vaccine-preventable diseases.
 - Polio vaccine was licensed in the United States in 1955. During 1951 to 1954, an average of 16,316 paralytic polio cases and 1,879 deaths from polio were reported each year. As of 1991, polio caused by wild-type viruses has been eliminated from the Western Hemisphere, and we are on course to eradicating polio from the world.
 - Smallpox used to kill millions of people each year around the world. This virus no longer circulates. No one has been infected with smallpox since 1977. That is the power that vaccines provide-- the ability to stop a killer.
 - A physician entering practice today will most likely never see a case of Hib meningitis. Before the introduction of effective vaccines, approximately one in 200 children developed invasive Hib disease before five years of age -- about 20,000 cases annually. Hib was the leading cause of bacterial meningitis in children under age five-- accounting for 50 to 65 percent of all cases. From 15 to 30 percent of affected children became hearing impaired and 2 to 5 percent died in spite of effective antibiotic therapy.
 - In the 1960s, many people witnessed first-hand, the terrible effects of the rubella virus. During an epidemic between 1964 and 1965, about 20,000 infants were born with deafness, blindness, heart disease, mental retardation, and other birth defects because the rubella virus infected their pregnant mothers. Today, thanks to an effective vaccine, the rubella virus poses little threat to expectant mothers and their children.
- Much public, media, and legislative attention in recent months has focused on vaccine safety. We welcome attention and interest on vaccine safety. The public should expect safe vaccines. The public is entitled to safe vaccines. We are committed to monitoring and ensuring vaccine

safety. Our key vaccine safety messages include:

- While no vaccine is 100% safe, the serious adverse events that do occur as a result of vaccination are extremely rare.
- We are committed to monitoring the serious adverse events believed to have occurred following immunization. We seek to determine whether these events are caused by the vaccines or are coincidental occurrences of rare illnesses that would have happened anyway.
- We strive to inform parents and the public about the risks and benefits of vaccines so that they have the proper basis for making immunization decisions.
- We carefully evaluate allegations of harmful vaccine effects and are prepared adjust our policies if allegations prove scientifically valid.
- We do not minimize the pain and suffering incurred by persons who believe they have been harmed by a vaccine--- regardless of the role that vaccines may or may not have played in the illness. As public health practitioners, we also advocate research that helps us determine the true causes of very real harms that have been suffered.
- A decision to vaccinate is a decision to protect not only an individual, but the entire community as well: a decision to not vaccinate is to put the community at risk. When immunization programs achieve high levels of community immunity, the likelihood that an infected person will transmit the disease to a susceptible individual is greatly reduced. This creates indirect protection. Those indirectly protected are children who may be too young for vaccination, yet still susceptible to the disease. For example, children under a year-old are too young to receive the measles vaccine. Also protected are children who cannot be vaccinated for medical reasons--- such as children with leukemia. In addition, some of the people protected by community immunity are people who have been vaccinated. Although vaccines are very effective, they are not 100 percent effective.
- Except for smallpox, these viruses and bacteria are still circulating--- either at low levels in the United States or elsewhere in the world. Those not circulating in this country are only a plane ride away. For example, each year the United States is hit with multiple importations of measles. Measles is no longer circulating in the United States, but the virus is frequently imported from outside this country. If we let our guard down and vaccination coverage levels drop, we will see a resurgence of measles. Just ten years ago in 1989, the United States was hit with a measles epidemic. The result was 55,000 cases of measles, 11,000 hospitalizations, and more than 120 deaths between 1989 and 1991.
- Vaccinations need to occur throughout our life span--- not just in childhood. The greatest vaccine-preventable disease burden for the U.S. population today is among adults. We estimate an average of 23,000 persons, primarily 65 and older, die from complications of influenza illness during epidemics. Over 10,000 more die from pneumococcal infections annually. Hepatitis B causes another 4,000 to 5,000 adult deaths each year. We have safe, effective, but highly under-utilized vaccines that can help us reduce the \$10 billion a year in societal costs brought about by vaccine-preventable diseases in adults.